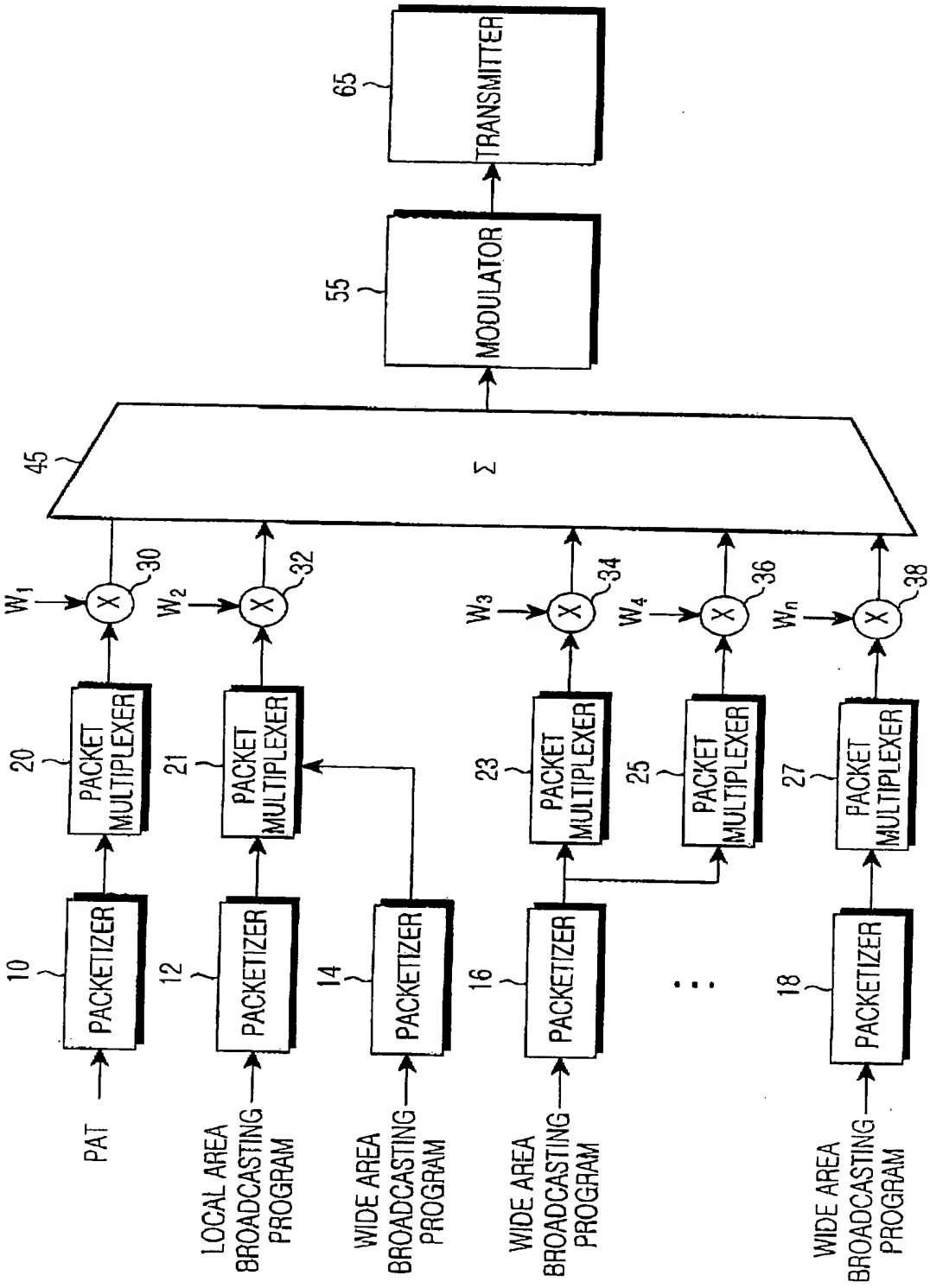
PAT
LOCAL AREA BROADCASTING PROGRAM
WIDE AREA BROADCASTING PROGRAM
WIDE AREA BROADCASTING PROGRAM
WIDE AREA BROADCASTING PROGRAM
PACKETIZER
PACKETIZER
PACKETIZER
PACKETIZER
PACKETIZER
PACKET MULTIPLEXER
PACKET MULTIPLEXER
PACKET MULTIPLEXER
PACKET MULTIPLEXER
PACKET MULTIPLEXER
10
12
14
16
18
20
21
23
25
27
W_1
W_2
W_3
W_4
W_n
30
32
34
36
38
45
Σ
55
MODULATOR
65
TRANSMITTER

FIG.1A

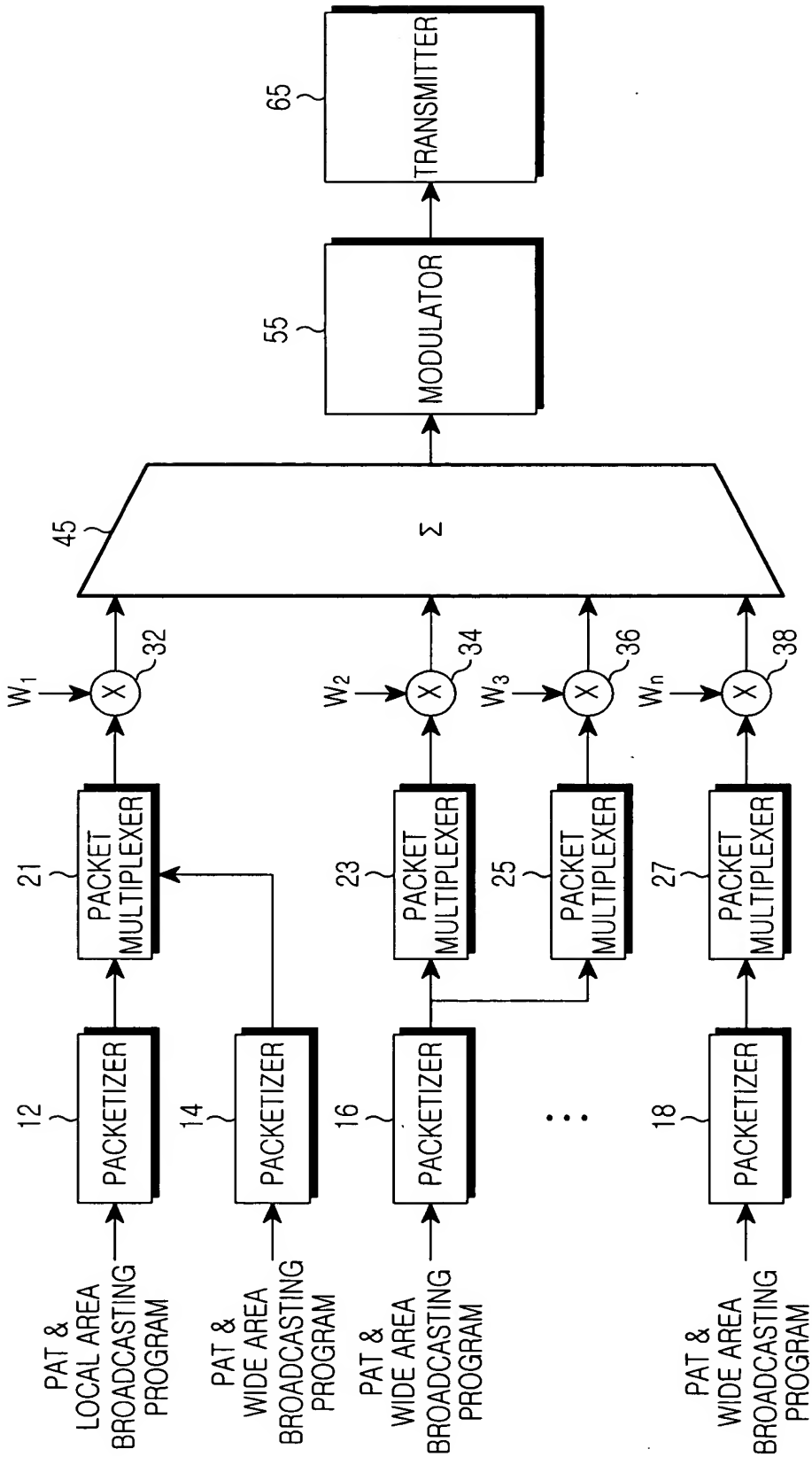
PAT & LOCAL AREA BROADCASTING PROGRAM
PAT & WIDE AREA BROADCASTING PROGRAM
PAT & WIDE AREA BROADCASTING PROGRAM
PAT & WIDE AREA BROADCASTING PROGRAM
12
PACKETIZER
14
PACKETIZER
16
PACKETIZER
18
PACKETIZER
21
PACKET MULTIPLEXER
23
PACKET MULTIPLEXER
25
PACKET MULTIPLEXER
27
PACKET MULTIPLEXER
W1
W2
W3
Wn
32
34
36
38
45
Σ
55
MODULATOR
65
TRANSMITTER

FIG.1B

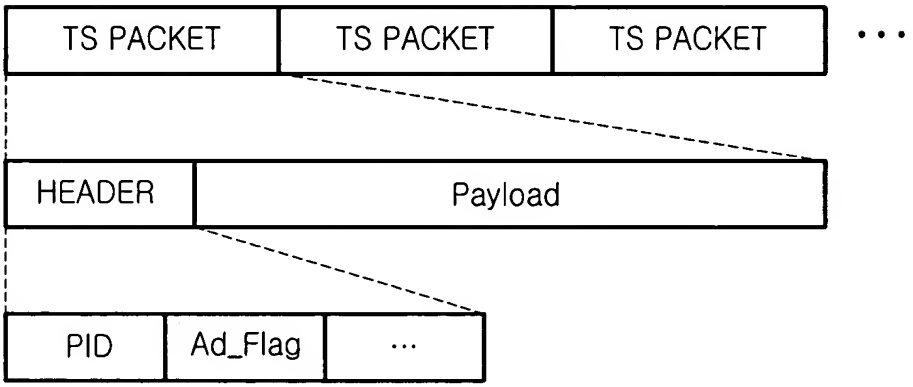

FIG.2

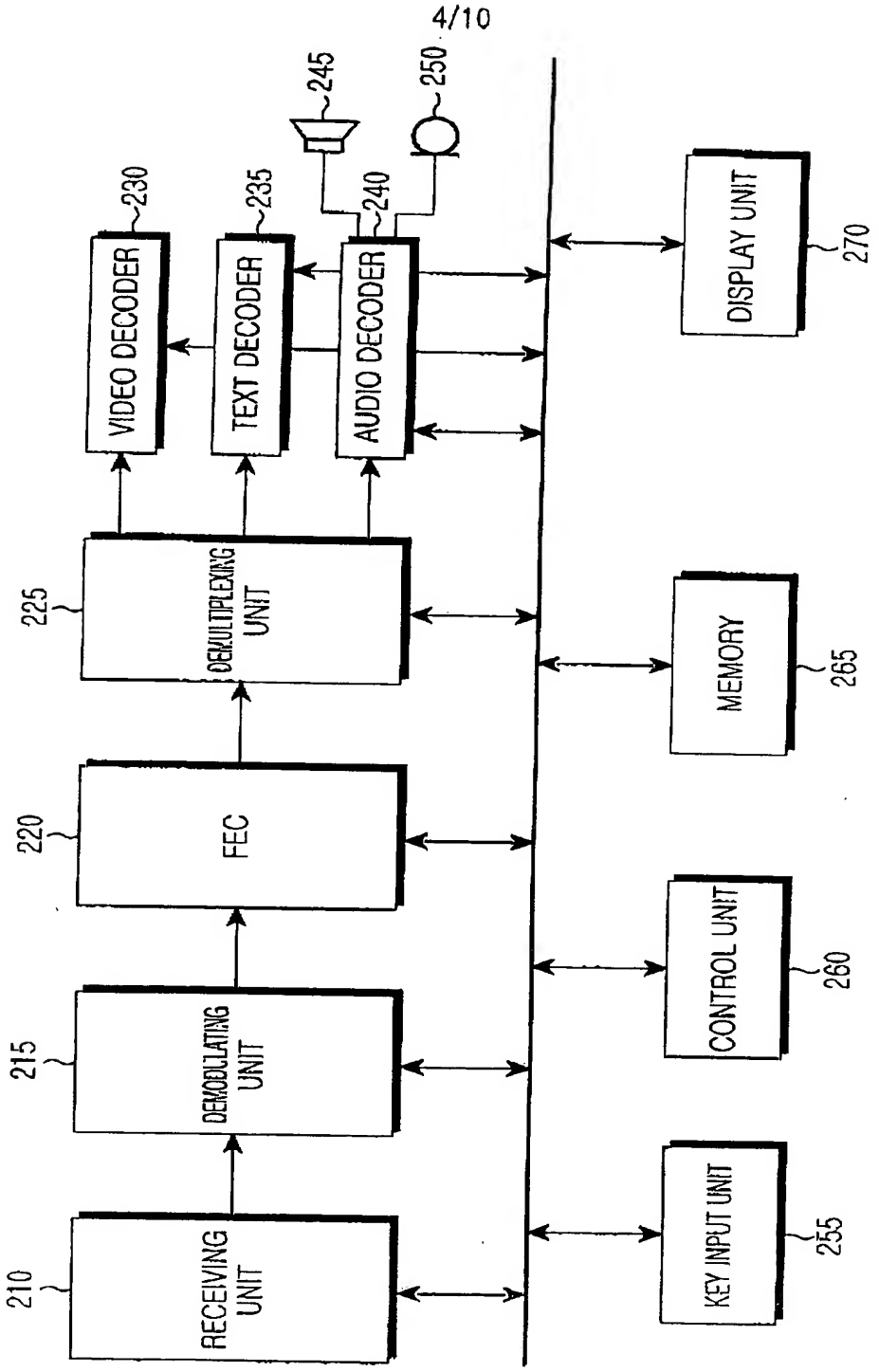
RECEIVING UNIT
210
DEMODULATING UNIT
215
FEC
220
DEMULTIPLEXING UNIT
225
VIDEO DECODER
230
TEXT DECODER
235
AUDIO DECODER
240
245
250
KEY INPUT UNIT
255
CONTROL UNIT
260
MEMORY
265
DISPLAY UNIT
270

FIG.3

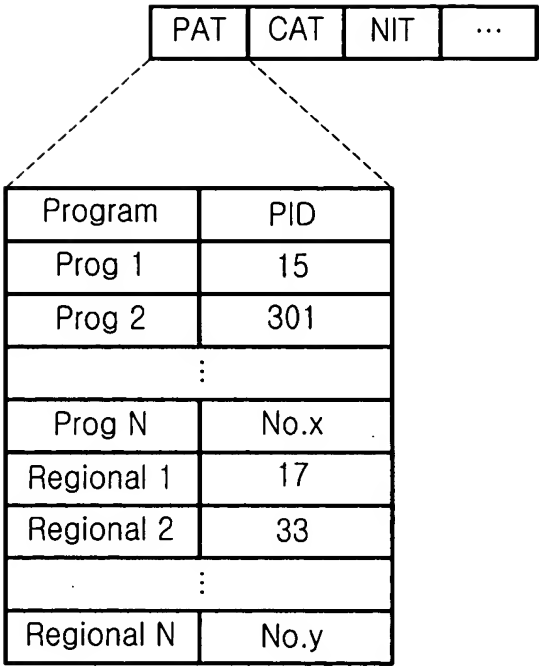
PAT
CAT
NIT
···
Program
PID
Prog 1
15
Prog 2
301
Prog N
No.x
Regional 1
17
Regional 2
33
Regional N
No.y

FIG.4A

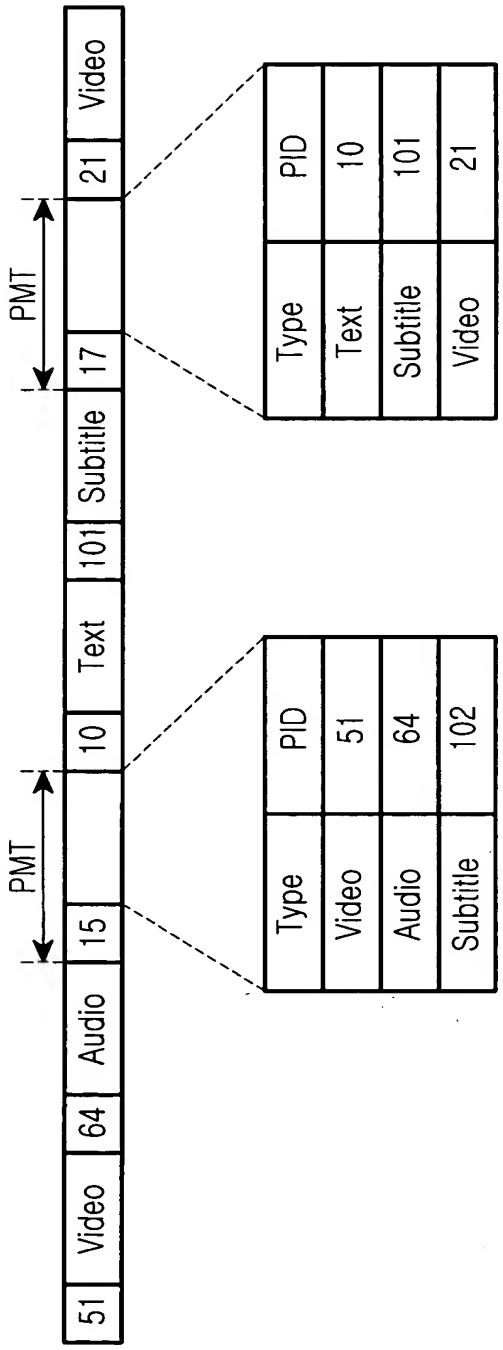
51
Video
64
Audio
15
PMT
10
Text
101
Subtitle
17
PMT
21
Video
Type
PID
Video
51
Audio
64
Subtitle
102
Type
PID
Text
10
Subtitle
101
Video
21

FIG.4B

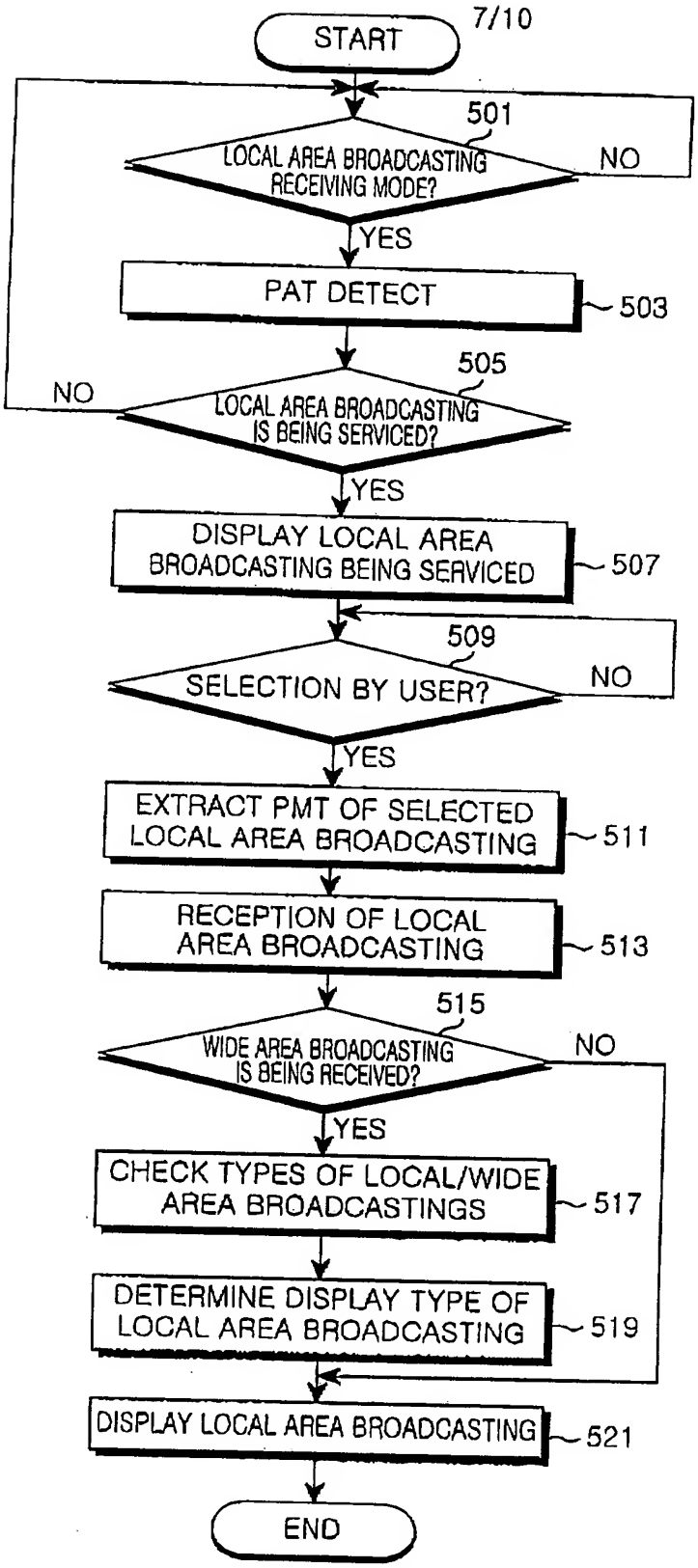
START
501
LOCAL AREA BROADCASTING RECEIVING MODE?
NO
YES
PAT DETECT
503
505
NO
LOCAL AREA BROADCASTING IS BEING SERVICED?
YES
DISPLAY LOCAL AREA BROADCASTING BEING SERVICED
507
509
SELECTION BY USER?
NO
YES
EXTRACT PMT OF SELECTED LOCAL AREA BROADCASTING
511
RECEPTION OF LOCAL AREA BROADCASTING
513
515
WIDE AREA BROADCASTING IS BEING RECEIVED?
NO
YES
CHECK TYPES OF LOCAL/WIDE AREA BROADCASTINGS
517
DETERMINE DISPLAY TYPE OF LOCAL AREA BROADCASTING
519
DISPLAY LOCAL AREA BROADCASTING
521
END

FIG.5

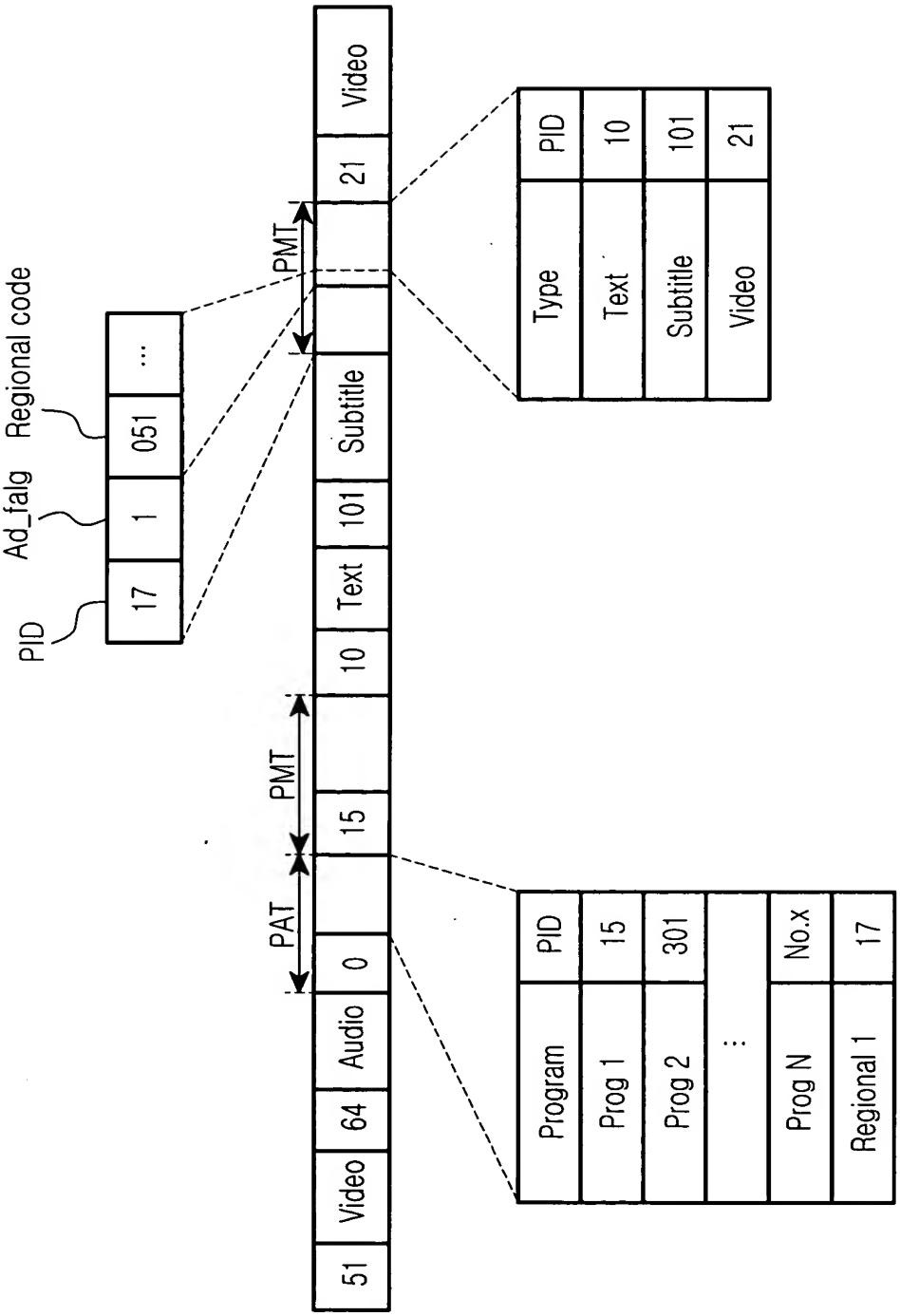
PID
Ad_falg
Regional code
17
1
051
...
PAT
PMT
PMT
0
15
10
101
21
51
Video
64
Audio
Text
Subtitle
Video
Program
PID
Prog 1
15
Prog 2
301
Prog N
No.x
Regional 1
17
Type
PID
Text
10
Subtitle
101
Video
21

FIG.6

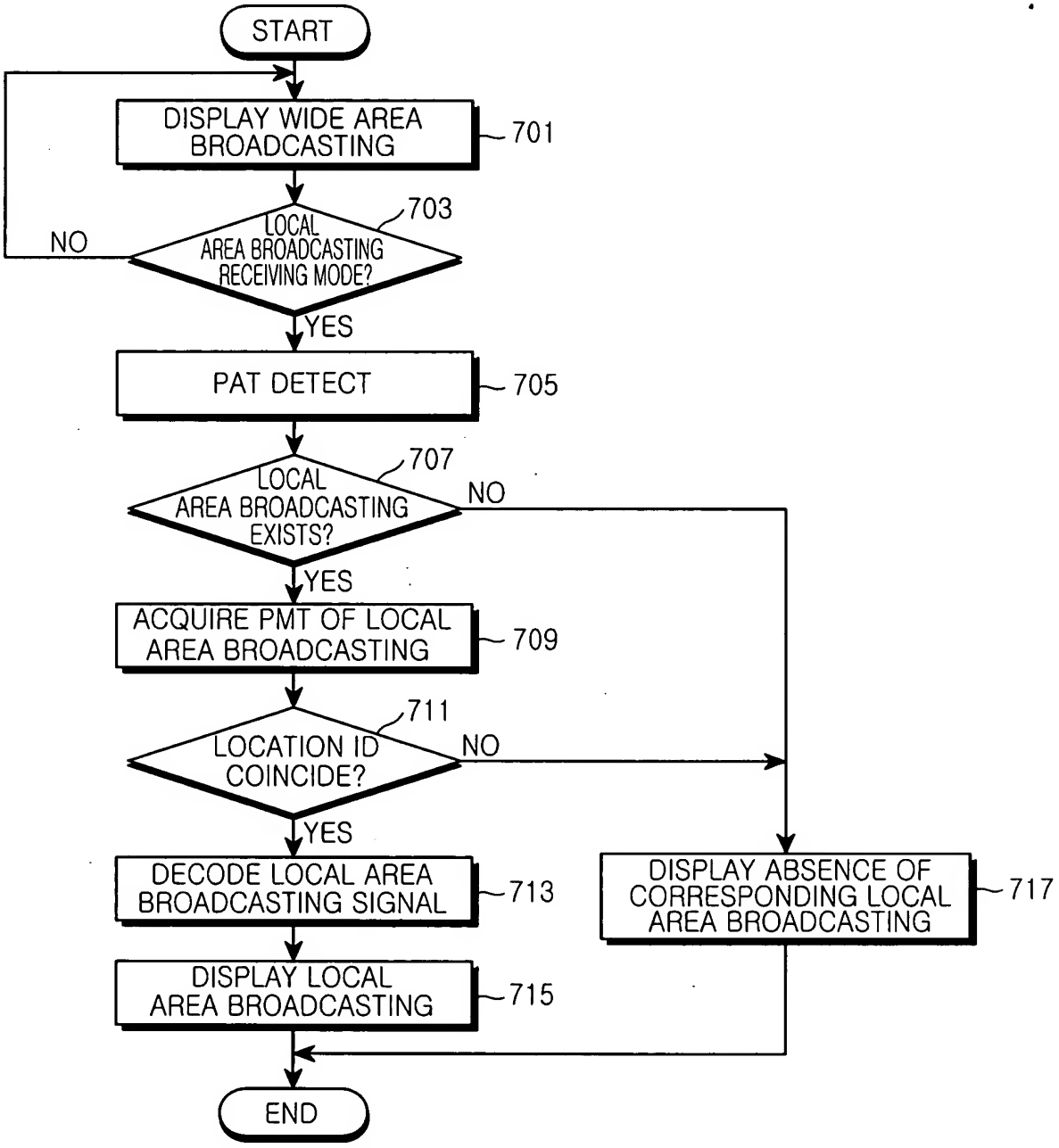
START
DISPLAY WIDE AREA BROADCASTING
701
LOCAL AREA BROADCASTING RECEIVING MODE?
703
NO
YES
PAT DETECT
705
LOCAL AREA BROADCASTING EXISTS?
707
NO
YES
ACQUIRE PMT OF LOCAL AREA BROADCASTING
709
LOCATION ID COINCIDE?
711
NO
YES
DECODE LOCAL AREA BROADCASTING SIGNAL
713
DISPLAY LOCAL AREA BROADCASTING
715
DISPLAY ABSENCE OF CORRESPONDING LOCAL AREA BROADCASTING
717
END

FIG.7

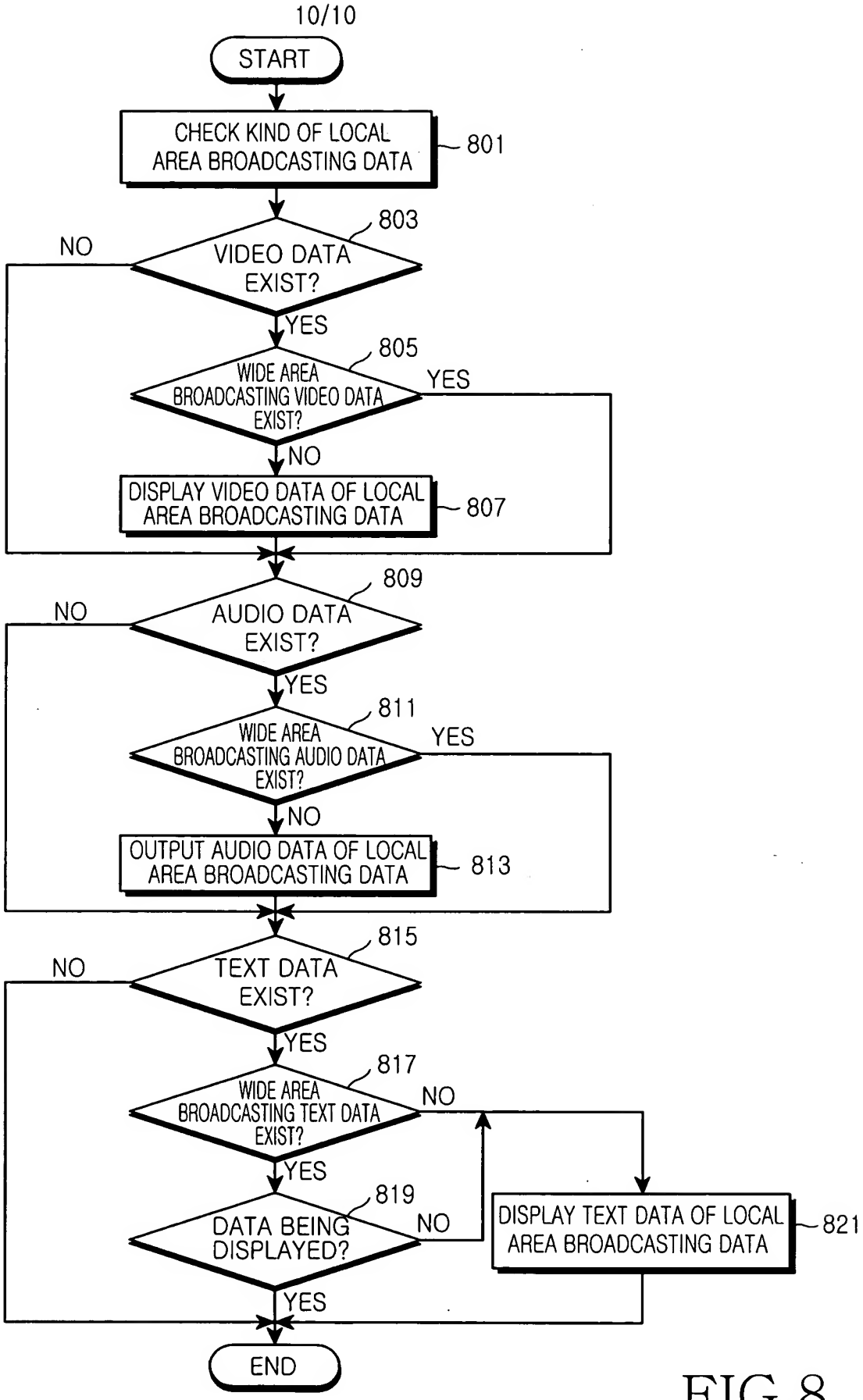
START
CHECK KIND OF LOCAL AREA BROADCASTING DATA
801
803
VIDEO DATA EXIST?
NO
YES
805
WIDE AREA BROADCASTING VIDEO DATA EXIST?
YES
NO
DISPLAY VIDEO DATA OF LOCAL AREA BROADCASTING DATA
807
809
AUDIO DATA EXIST?
NO
YES
811
WIDE AREA BROADCASTING AUDIO DATA EXIST?
YES
NO
OUTPUT AUDIO DATA OF LOCAL AREA BROADCASTING DATA
813
815
TEXT DATA EXIST?
NO
YES
817
WIDE AREA BROADCASTING TEXT DATA EXIST?
NO
YES
819
DATA BEING DISPLAYED?
NO
YES
DISPLAY TEXT DATA OF LOCAL AREA BROADCASTING DATA
821
END

FIG.8